### **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: \_

Source:

Date Processed by STIC:

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IFWP

RAW SEQUENCE LISTING DATE: 02/09/2006
PATENT APPLICATION: US/10/566,941 TIME: 14:10:57

Input Set : A:\11916.0058.PCUS02.ST25.txt
Output Set: N:\CRF4\02012006\J566941.raw

```
3 <110> APPLICANT: Dyer, Cheryl J.
              Du, Fengxing
      5
              Grosz, Michael D.
              Byatt, John C.
      8 <120> TITLE OF INVENTION: USE OF A SINGLE NUCLEOTIDE POLYMORPHISM IN THE CODING REGION
OF
              THE LEPTIN RECEPTOR GENE TO ENHANCE PORK PRODUCTION
                                                                           (pg.6)
     11 <130> FILE REFERENCE: 11916.0058.PCUS02
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/566,941
C--> 13 <141> CURRENT FILING DATE: 2006-02-02
     13 <150> PRIOR APPLICATION NUMBER: US. 60/553,582
     14 <151> PRIOR FILING DATE: 2004-03-16
     16 <150> PRIOR APPLICATION NUMBER: U.S. 60/493,158
     17 <151> PRIOR FILING DATE: 2003-08-07
     19 <160> NUMBER OF SEQ ID NOS: 44
     21 <170> SOFTWARE: PatentIn version 3.3
     23 <210> SEQ ID NO: 1
    24 <211> LENGTH: 21
    25 <212> TYPE: DNA
     26 <213> ORGANISM: Artificial Sequence
     28 <220> FEATURE:
    29 <223> OTHER INFORMATION: Synthetic nucleotide
    31 <400> SEQUENCE: 1
     32 atgatgaggc agttgttgca a
                                                                               21
    35 <210> SEQ ID NO: 2
     36 <211> LENGTH: 20
     37 <212> TYPE: DNA
    38 <213> ORGANISM: Artificial Sequence
    40 <220> FEATURE:
    41 <223> OTHER INFORMATION: Synthetic nucleotide
    43 <400> SEQUENCE: 2
    44 ccttccctgc aatgttgtct
                                                                               20
    47 <210> SEQ ID NO: 3
    48 <211> LENGTH: 773
    49 <212> TYPE: DNA
    50 <213> ORGANISM: Sus scrofa
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    53 gtgggttaag gacctgatgt tgtcactact atggctcgag tcactgctgg ggcatgagtt
                                                                              60
    55 tgatccctgg tcctggaaat tcacatgctg tgcatgtggc catatatata tgtatgtatg
                                                                             120
    57 tgtatatata tacactcaca tacatgtata tatatatatg tgagtgtata tatatattta
                                                                             180
    59 tgatgtcaaa ttaatgggga aaataaaatg tgaatttcta aaaaggggtg ctaaagagtg
                                                                             240
    61 gcattatctc taagggtata tgctccctct taagtataac actttggaca atggaagagc
                                                                             300
    63 tttgtattag gcactgtttg agcacttgga aagttaaata attattgttg aagactgcat
                                                                             360
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65 gttttaatet tagataette etatttatgt ettagteaaa atgattaatt gettttetat

420

# RAW SEQUENCE LISTING DATE: 02/09/2006 PATENT APPLICATION: US/10/566,941 TIME: 14:10:57

67 gtgtctttta aatgtcctaa cagaatttat ttatgtgata actgcatttg acttggcata	480					
69 tccaattact ccttggaaat ttaagttgtc ttgcatgcca ccaaatacaa catatgactt	540					
71 cctcttgcct gctggaatct caaagaacac ttcaactttg aatggacatg atgaggcagt	600					
73 tgttgaaacg gaacttaatt caagtggtac ctacttatca aacttatctt ctaaaacaac	660					
75 tttccactgt tgcttttgga gtgaggaaga taaaaactgc tctgtacatg cagacaacat	720					
77 tgcagggaag gcatttgttt cagcagtaaa ttccttagtt tttcaacaaa cag	773					
80 <210> SEQ ID NO: 4						
81 <211> LENGTH: 20						
82 <212> TYPE: DNA						
83 <213> ORGANISM: Artificial Sequence						
<220> FEATURE:						
<223> OTHER INFORMATION: Synthetic nucleotide						
3 <400> SEQUENCE: 4						
9 gcactgtttg agcacttgga						
2 <210> SEQ ID NO: 5						
93 <211> LENGTH: 20						
94 <212> TYPE: DNA						
95 <213> ORGANISM: Artificial Sequence						
97 <220> FEATURE:						
98 <223> OTHER INFORMATION: Synthetic nucleotide						
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101 ccttccctgc aatgttgtct	20					
104 <210> SEQ ID NO: 6						
105 <211> LENGTH: 25						
106 <212> TYPE: DNA						
107 <213> ORGANISM: Artificial Sequence						
109 <220> FEATURE:						
110 <223> OTHER INFORMATION: Synthetic nucleotide						
112 <400> SEQUENCE: 6						
113 ttcaactttg aatggacatg atgag	25					
16 <210> SEQ ID NO: 7						
117 <211> LENGTH: 30						
118 <212> TYPE: DNA						
119 <213> ORGANISM: Artificial Sequence						
121 <220> FEATURE:						
122 <223> OTHER INFORMATION: Synthetic nucleotide						
124 <400> SEQUENCE: 7						
125 gtggaaagtt gttttagaag ataagtttga	30					
128 <210> SEQ ID NO: 8	30					
129 <211> LENGTH: 16						
130 <212> TYPE: DNA						
131 <213> ORGANISM: Artificial Sequence 133 <220> FEATURE:						
133 <220> FEATURE: 134 <223> OTHER INFORMATION: Synthetic nucleotide						
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136 <400> SEQUENCE: 8	10					
137 tgttgaaacg gaactt	16					
140 <210> SEQ ID NO: 9						
141 <211> LENGTH: 17						
142 <212> TYPE: DNA						

## RAW SEQUENCE LISTING DATE: 02/09/2006 PATENT APPLICATION: US/10/566,941 TIME: 14:10:57

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143 <213> ORGANISM: Artificial Sequence
     145 <220> FEATURE:
     146 <223> OTHER INFORMATION: Synthetic nucleotide
     148 <400> SEQUENCE: 9
     149 tgttgaaatg gaactta
                                                                              17
     152 <210> SEQ ID NO: 10
    153 <211> LENGTH: 421
    154 <212> TYPE: DNA
    155 <213> ORGANISM: Sus scrofa
     158 <220> FEATURE:
    159 <221> NAME/KEY: CDS
    160 <222> LOCATION: (133)..(420)
    162 <220> FEATURE:
    163 <221> NAME/KEY: misc feature
    164 <222> LOCATION: (299)..(299)
    165 <223 > OTHER INFORMATION: N = T or C
    167 <220> FEATURE:
    168 <221> NAME/KEY: misc_feature
    169 <222> LOCATION: (310)..(310)
    170 <223 > OTHER INFORMATION: N = T or A
    172 <220> FEATURE:
    173 <221> NAME/KEY: misc_feature
    174 <222> LOCATION: (311)..(311)
    175 <223> OTHER INFORMATION: N = T or C
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    178 gcactgtttg agcacttgga aagttaaata attattgttg gagactgcat gttttaatct
                                                                              60
    180 tagatacttc ctatttatgt cttagtcaaa atgattaatt gcttttctat gtgtctttta
                                                                             120
    182 aatgtcctaa ca gaa ttt att tat gtg ata act gca ttt gac ttg gca tat
                                                                             171
    183
                      Glu Phe Ile Tyr Val Ile Thr Ala Phe Asp Leu Ala Tyr
    184
    186 cca att act cct tgg aaa ttt aag ttg tct tgc atg cca cca aat aca
                                                                             219
    187 Pro Ile Thr Pro Trp Lys Phe Lys Leu Ser Cys Met Pro Pro Asn Thr
    190 aca tat gac ttc ctc ttg cct gct gga atc tca aag aac act tca act
                                                                             267
    191 Thr Tyr Asp Phe Leu Leu Pro Ala Gly Ile Ser Lys Asn Thr Ser Thr
    192 30
                                                40
W--> 194 ttg aat gga cat gat gag gca gtt gtt gaa ang gaa ctt aat nna agt
                                                                             315
    195 Leu Asn Gly His Asp Glu Ala Val Val Glu Xaa Glu Leu Asn Xaa Ser
    363
    199 Gly Thr Tyr Leu Ser Asn Leu Ser Ser Lys Thr Thr Phe His Cys Cys
                                        70
    202 ttt tgg agt gag gaa gat aaa aac tgc tct gta cat gca gac aac att
                                                                             411
    203 Phe Trp Ser Glu Glu Asp Lys Asn Cys Ser Val His Ala Asp Asn Ile
    204
                80
                                    85
                                                                             421
    206 gca ggg aag g
    207 Ala Gly Lys
    208
            95
    211 <210> SEO ID NO: 11
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### RAW SEQUENCE LISTING DATE: 02/09/2006 PATENT APPLICATION: US/10/566,941 TIME: 14:10:57

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212 <211> LENGTH: 96
     213 <212> TYPE: PRT
     214 <213> ORGANISM: Sus scrofa
     216 <220> FEATURE:
    . 217 <221> NAME/KEY: misc feature
     218 <222> LOCATION: (56)..(56)
     219 <223> OTHER INFORMATION: The 'Xaa' at location 56 stands for Lys, Arg, Thr, or Met.
     221 <220> FEATURE:
     222 <221> NAME/KEY: misc feature
     223 <222> LOCATION: (60)..(60)
     224 <223> OTHER INFORMATION: The 'Xaa' at location 60 stands for Lys, Arg, Thr, Ile, Glu,
Gly,
               Ala, Val, Gln, Pro, Leu, or Ser.
     227 <400> SEQUENCE: 11
     229 Glu Phe Ile Tyr Val Ile Thr Ala Phe Asp Leu Ala Tyr Pro Ile Thr
     233 Pro Trp Lys Phe Lys Leu Ser Cys Met Pro Pro Asn Thr Thr Tyr Asp
     234
                     20
                                         25
     237 Phe Leu Leu Pro Ala Gly Ile Ser Lys Asn Thr Ser Thr Leu Asn Gly
W--> 241 His Asp Glu Ala Val Val Glu Xaa Glu Leu Asn Xaa Ser Gly Thr Tyr
     242
                                 55
     245 Leu Ser Asn Leu Ser Ser Lys Thr Thr Phe His Cys Cys Phe Trp Ser
                             70
                                                  75
     249 Glu Glu Asp Lys Asn Cys Ser Val His Ala Asp Asn Ile Ala Gly Lys
    250
                         85
                                             90
    253 <210> SEQ ID NO: 12
    254 <211> LENGTH: 4050
    255 <212> TYPE: DNA
    256 <213> ORGANISM: Sus scrofa
    258 <400> SEQUENCE: 12
    259 cttctctgaa gtaagatgac gtgtccaaag ttctctgtgg ctttgttaca ttgggaattt
                                                                                60
    261 atttatgtga taactgcatt tgacttggca tatccaatta ctccttggaa atttaagttg
                                                                               120
    263 tettgeatge caccaaatac aacatatgae tteetettge etgetggaat eteaaagaac
                                                                               180
    265 acttcaactt tgaatggaca tgatgaggca gttgttgaaa cggaacttaa tataagtggt
                                                                               240
    267 acctacttat caaacttatc ttctaaaaca actttccact gttgcttttg gagtgaggaa
                                                                               300
    269 gataaaaact gctctgtaca tgcagacaac attgcaggga aggcatttgt ttcagcagta
                                                                               360
    271 aatteettag titticaaca aacaqqiqca aactqqaaca tacaqiqciq qatqaaaqaq
                                                                               420
    273 gacttgaaat tattcatctg ttatatggag tcattattta agaatccttt caagaattat
                                                                               480
    275 gaccttaaag ttcatctttt atatgttctg ctcgaagtgt tagaaggatc acctctgctc
                                                                               540
    277 ccccagaaag gtagttttca gagcgttcaa tgcaactgca gtgctcgtga atgttgtgaa
                                                                               600
    279 tgccatgtgc ctgtgtcggc agccaaactc aactacaccc ttcttatgta tttgaaaatc
                                                                               660
    281 acatetggtg gageagtttt teacteacet eteatgteag tteageecat aaacgttgtg
                                                                               720
    283 aagcetgate caccattagg tttgcatatg gaaatcacag acactggtaa tttaaagatt
                                                                               780
    285 tcttggtcca gcccaacact ggtaccattt caacttcaat atcaagtaaa atattcagag
                                                                               840
    287 aattetacaa caaatatgag agaagetgat gagategtet cagatacate tetgettgta
                                                                               900
    289 gacagtgtgc ttcccgggtc ttcatatgag gttcaggtga ggggcaagag actggatggc
                                                                               960
    291 ccaggaatet ggagtgactg gagcacccc tttactttta ccacacaaga tgttatatac
                                                                              1020
    293 tttccaccta aaattctgac aagtgttggg tctaacattt cttttcactg catctataaa
                                                                              1080
    295 aatgagaaca agatcgtttc ctcaaaaaag attgtttggt ggatgaattt agctgagaag
                                                                              1140
```

# RAW SEQUENCE LISTING DATE: 02/09/2006 PATENT APPLICATION: US/10/566,941 TIME: 14:10:58

297	attcctcaaa	gtcagtatga	tgttgtgggt	gaccatgtta	gcaaagtcac	ttttcccaat	1200
299	atgaatgcaa	ccaaacctcg	aggaaagttc	acctatgatg	cagtgtactg	ctgcaatgag	1260
301	cacgagtgcc	accatcgcta	tgctgagtta	tatgtgattg	atgtcaatat	caatatatca	1320
303	tgtgaaactg	atgggtactt	aactaaaatg	acttgcagat	ggtcaaccaa	tgcaatccaa	1380
305	tcacttgtgg	gaagcacttt	gcagttgagg	tatcatagga	gtagcctcta	ctgttctgac	1440
307	gttccatctg	tgcatcccat	atctgaaccc	aaagattgcc	agttgcagag	agatggtttt	1500
309	tatgaatgca	tatttcagcc	aatatttctg	ctatctggct	atacaatgtg	gattagaata	1560
311	aatcacccgt	tgggttcact	tgattctcca	ccaacatgtg	tcattcctga	ttccgtggtg	1620
			tgtgaaagca				1680
315	atatcttggg	agaagccagt	cttcccagag	aataatcttc	agttccagat	tcgctatggt	1740
317	ttaagtggaa	aagaagtaca	gtggaagatc	tatgaggtat	atgacacaaa	gttaaaatcc	1800
			cctgtgtgca				1860
			gagtaattgg				1920
			acctgaattt				1980
			gctctggaag				2040
			acatcatact				2100
			tttcctttgg				2160
			ttcttccgca				2220
			gtcgctcagt				2280
			cagtgattac				2340
			aattaaatgg				2400
	_	-	tcctattgag	_	_	_	2460
			gaagataatt				2520
			tgtaattgtg				2580
			acaccaaaga				2640
			ggcacaagga				2700
			agaatcagtg				2760
			tgttgataca				2820
			cttgacaact				2880
			ccacttctct				2940
			ctctattaaa				3000
			agaacttgta				3060
			gtctttctcg				3120
			gcatcccaat				3180
			gtttgaggga				3240
			cacctcaatc				3300
			cccattccca				3360
			ccttgtagaa	-			3420
			gcctcaattt				3480
			cctaaccgtc				3540
			agggtaatat				3600
			aaatgacttc				3660
			tgtgagaaag				3720
			cggctacagt				3780
			tagcgttttg				3840
			ctgaaagaag				3900
	_		ttatcttgag	-			3960
			taataggcat				4020
	_	_		cergradatt	yıtaaatata	tyatytatt	4020
393	gtttttgtgc	Laaaadadd	aaaaaaadd				4000

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 02/09/2006
PATENT APPLICATION: US/10/566,941 TIME: 14:10:59

Input Set : A:\11916.0058.PCUS02.ST25.txt
Output Set: N:\CRF4\02012006\J566941.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:10; N Pos. 299,
Seq#:10; Xaa Pos. 50,60
Seq#:11; Xaa Pos. 5/6,60
Seq#:13; N Pos. 425,428,429,430,484,485,498,499,527,528,567,568,579,580,586
Seq#:13; N Pos. 587,588,595,596,597,599,600,602,603,604,605,606,608,610,611
Seq#:13; N Pos. 612,613,614,615,616,617,618,619,620,621,622,623,641,642,643
Seq#:13; N Pos. 644,645,646,647,648,649,650,651,657,663,664,666,667,668,669
Seq#:13; N Pos. 670,671,672,673,674,675,676,677,678,679,680,681,682,683,685
Seq#:13; N Pos. 686,687,691,692,693,694,695,696,697,698,699,700,701,702,703
Seq\#:13;\ N\ Pos.\ 704,706,707,709,710,711,712,713,714,715,716,717,718,719,720
Seq#:13; N Pos. 721,722,723,724,725,726,727,728,729,730,731,732,733,734,735
Seq#:13; N Pos. 736,737,738,739,740,741,742,743,744,745,746,747,748,749,750
Seq#:13; N Pos. 751,752,753,754,755,756,757,758,759,760,761,762,763,764,765
Seq#:13; N Pos. 766,767,768,769,770,771,772,773,774,775,776,777,778,779,780
Seq#:13; N Pos. 781,782,783,784,785,786,787,788,789,790,791,792,793,794,795
Seq#:13; N Pos. 796,797,798,799,800,801,802,803,804,805,806,807,808,809,810
Seq#:13; N Pos. 811,812,813,814,815,816,817,818,819,820,821,822,823,824,825
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Seq#:13; N Pos. 841,842,843,844,845,846,847,848,849,850,851,852,853,854,858
Seq#:13; N Pos. 859,861,867,868,869,870,871,872,876,878,879,880,881,882,883
Seq#:13; N Pos. 885
Seq#:14; N Pos. 403,404,407,408,409,418,419,420,432,433,434,435,436,442,443
Seq#:14; N Pos. 444,445
Seq#:15; N Pos. 658,659,660,667,668,669,670,671,673,674,675,682,689,690,691
Seq#:15; N Pos. 692,693,696,697,698,699,700,702,731,732,739,745,746,751,752
Seq#:15; N Pos. 753,755,756,758,759,760,764,767,768,770
Seq#:42; N Pos. 103
Seq#:43; N Pos. 192
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#### VERIFICATION SUMMARY

DATE: 02/09/2006 TIME: 14:10:59 PATENT APPLICATION: US/10/566,941

Input Set : A:\11916.0058.PCUS02.ST25.txt Output Set: N:\CRF4\02012006\J566941.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application No L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date L:194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:267 M:341 Repeated in SeqNo=10 L:241 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:48 L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:420 M:341 Repeated in SeqNo=13 L:469 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:360 M:341 Repeated in SeqNo=14 L:506 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:600 M:341 Repeated in SeqNo=15 L:865 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:60 L:896 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:180